Technical Pro MM2000BT

Technical Pro MM2000BT Powered Bluetooth Karaoke Mixer Amplifier User Manual

Brand: Technical Pro | Model: MM2000BT

1. INTRODUCTION

The Technical Pro MM2000BT is a versatile mic mixing amplifier designed for audio professionals and enthusiasts. It combines powerful amplification with comprehensive mixing capabilities, making it suitable for various applications including karaoke, live sound, and home entertainment. This manual provides detailed instructions for setting up, operating, and maintaining your MM2000BT amplifier.

Key Features:

- Six microphone inputs (two XLR balanced, four 1/4" unbalanced).
- Built-in 10-band equalizer for precise audio tuning.
- USB and SD card inputs for digital media playback (up to 32 GB).
- Wireless Bluetooth compatibility (v2.0 with EDR, 2.4GHz, 30 feet range).
- Auxiliary inputs (3.5mm and RCA) for connecting various audio sources.
- Bass and treble controls for individual mic and music inputs.
- Digital display for easy navigation and status updates.
- Balance controls for audio output.
- Peak power output of 2000 Watts.
- Voltage: 110/220v selectable.

2. SAFETY INFORMATION

To ensure safe operation and prevent damage to the unit, please read and follow all safety instructions:

- **Power Source:** Connect the unit only to the specified power supply (110/220V). Ensure the voltage selector switch on the rear panel matches your local power supply before plugging in.

- **Ventilation:** Do not block ventilation openings. Ensure adequate airflow around the unit to prevent overheating.
- **Liquids:** Do not expose the unit to rain or moisture. Do not place objects filled with liquids, such as vases, on the unit.
- **Cleaning:** Clean only with a dry cloth. Do not use liquid cleaners or aerosol cleaners.
- **Servicing:** Do not attempt to service this unit yourself. Refer all servicing to qualified service personnel. Opening the unit will void the warranty.
- **Placement:** Place the unit on a stable, flat surface. Avoid placing it near heat sources or in direct sunlight.

3. PACKAGE CONTENTS

Please check the box for the following items:

- Technical Pro MM2000BT Mixer Amplifier
- Power Cable
- User Manual
- Mounting Brackets (for rack mounting)

Figure 1: Included accessories with the MM2000BT amplifier, showing the unit, power cable, and user manual.

4. FRONT PANEL CONTROLS

The front panel of the MM2000BT provides access to all essential controls for mixing microphones, music, and adjusting audio output.

Figure 2: Detailed front panel layout of the MM2000BT, highlighting microphone and music input sections, equalizers, and master controls.

4.1. Microphone Input Section

The MM2000BT features six microphone inputs, each with dedicated volume and tone controls.

- **MIC 1-4 (1/4" Unbalanced):** Connect standard microphones with 1/4" TS connectors.
- **MIC 5-6 (XLR Balanced):** Connect professional microphones with XLR connectors.
- **Volume Knobs (MIC 1-2, MIC 3-4, MIC 5, MIC 6):** Adjust the individual volume levels for each microphone input.
- **Echo Controls (Delay, Repeat, Hi, Lo, Vol):** Fine-tune the echo effect for microphones. Adjust delay time, repetition rate, high/low frequencies of the echo, and overall echo volume.
- **Tone Controls (Hi, Mid, Lo):** Adjust the high, mid, and low frequencies for microphone channels to shape the vocal sound.

Figure 3: Detailed view of the microphone input channels, showing XLR and 1/4" inputs, volume, echo, and tone controls.

4.2. Music Input Section

This section manages the various music sources and their respective controls.

- **Digital Display:** Shows current input mode (USB, SD, Bluetooth, FM Radio) and track information.
- **USB/SD/MMC Card Slots:** Insert USB drives or SD/MMC cards for digital audio playback.
- **Control Buttons (Folder, Play/Pause, Mode, Skip):** Navigate tracks, change input modes, and control playback.
- **MP3 Volume Knob:** Controls the master volume for USB, SD, Bluetooth, and 3.5mm Aux inputs.
- **Bass/Treble Controls (Music):** Adjust the low and high frequencies for the music input.
- **Balance Knob:** Adjusts the left/right balance of the music output.

Figure 4: Focus on the digital display, USB/SD slots, and music control knobs, including bass, treble, and balance.

4.3. Equalizer and Master Controls

These controls allow for overall sound shaping and master volume adjustment.

- **Dual 10-Band Equalizer:** Adjust specific frequency bands (32Hz to 16kHz) for both left and right channels to fine-tune the overall sound output. Adjustment range: ±12dB.
- **Phantom Power (+48V) Switch:** Activates 48V phantom power for condenser microphones connected to the XLR inputs.
- **Master Volume Knob:** Controls the overall output volume of the entire mixer amplifier.

Figure 5: View of the dual 10-band equalizer sliders, phantom power switch, and master volume knob.

5. REAR PANEL CONNECTIONS

The rear panel houses all the necessary connections for power, speakers, and external audio devices.

Figure 6: Detailed rear panel connections, including power input, speaker outputs, and RCA connections.

- **POWER (110V/220V Selector):** Connect the included power cable. Ensure the voltage selector switch is set to your local power supply.
- **SPEAKER OUTPUT (Banana Binding Post):** Connect passive speakers (4-16 ohms) using banana plugs or bare speaker wire. The amplifier supports two channels (Ch. A and Ch. B).
- **INPUT (Loop, Line, DVD, Aux RCA):** Connect external audio sources such as CD players, DVD players, or other line-level devices using RCA cables.
- **OUTPUT (Loop, Line RCA):** Provides RCA line-level outputs for connecting to additional amplifiers, powered speakers, or recording devices.
- **FM ANT:** Connect an FM antenna for radio reception.

Figure 7: Closer look at the speaker binding posts and various RCA input/output options on the rear panel.

6. SETUP

Follow these steps for initial setup of your MM2000BT amplifier:

1. **Placement:** Place the amplifier on a stable, flat surface, ensuring adequate ventilation. If rack-mounting, secure it properly using the provided brackets.
2. **Power Connection:**

a. Verify the 110V/220V selector switch on the rear panel matches your local power supply.

b. Connect the power cable to the amplifier's power input and then to a wall outlet.

3. **Speaker Connection:**

a. Connect your passive speakers to the SPEAKER OUTPUT terminals on the rear panel. Ensure correct polarity (+ to + and - to -). The amplifier supports 4-16 ohm speakers.

b. **Important:** Do not connect powered speakers to these outputs.

4. **Microphone Connection:**

a. For dynamic microphones, connect to the 1/4" (MIC 1-4) or XLR (MIC 5-6) inputs on the front panel.

b. For condenser microphones requiring phantom power, connect to XLR inputs and activate the +48V PHANTOM switch on the front panel.

5. **Audio Source Connection:**

a. **Bluetooth:** Ensure the amplifier is in Bluetooth mode (select via MODE button). Enable Bluetooth on your device and select "Rockville" or "MM2000BT" from the list of available devices.

b. **USB/SD:** Insert a USB drive or SD card into the respective slot on the front panel. The unit will automatically switch to USB/SD mode or can be selected via the MODE button.

c. **RCA/Aux:** Connect external devices (CD player, DVD player, phone via 3.5mm to RCA cable) to the LINE IN (RCA) or AUX IN (3.5mm) ports. Select the appropriate input via the MODE button.

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Video 1: This video demonstrates the setup process for a similar powered mixer, including connecting speakers, microphones, and various audio sources. It provides a visual guide to the physical connections and initial power-on sequence.

7. OPERATING INSTRUCTIONS

Once your MM2000BT is set up, you can begin operating it using the front panel controls.

7.1. Microphone Operation

1. Ensure microphone volume knobs are initially set to minimum.

2. Speak into the microphone and slowly increase its respective volume knob until the desired level is reached.

3. Adjust the MIC Hi, Mid, Lo controls to fine-tune the microphone's tone.

4. Use the ECHO controls (Delay, Repeat, Hi, Lo, Vol) to add and customize the echo effect.

7.2. Music Playback

1. Select your desired input source (Bluetooth, USB, SD, RCA/Aux) using the MODE button.

2. For Bluetooth, ensure your device is paired. For USB/SD, ensure media is inserted. For RCA/Aux, ensure the external device is playing.

3. Adjust the MP3 Volume knob for digital sources or the LINE IN Volume knob for RCA inputs to control music level.

4. Use the MUSIC Bass and Treble controls to adjust the music's tone.

5. Adjust the Balance knob to shift the music output between left and right channels.

7.3. Master Audio Adjustment

1. Use the Dual 10-Band Equalizer sliders to boost or cut specific frequencies across the entire mix.

2. Adjust the Master Volume knob to control the final output level of all audio combined.

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Video 2: This video provides a brief overview of the Technical Pro 2000 Watts Professional Mixer and Amplifier, showcasing its various controls and features in action.

8. SPECIFICATIONS

Feature	Specification
Peak Power	2000 Watts
RMS Watts per Channel	355 Watts
Inputs	RCA (2 audio sources), USB, SD Card, Bluetooth, Mp3 (3.5mm)
Audio Outputs	Banana binding post (4 speakers), RCA (Line Out), Headphones (3.5mm)
Speaker Outputs	Bare speaker wire (2 speakers)
Playback Formats	.mp3, .wav, .wma
Recording	128 kbps / 44.1 KHz on .wav (to SD Cards and Flash Drives)
Bluetooth Version	v2.0 with EDR (2.4GHZ)
Bluetooth Range	30 feet
USB Input	5V power supply (32 GB Max)
Mic Inputs	Two XLR (balanced), Four 1/4" (unbalanced)
Equalization Points	32Hz, 64Hz, 125Hz, 250Hz, 500Hz, 1kHz, 2kHz, 4KHz, 8kHz, 16kHz
Adjustment Range (EQ)	±12dB
Frequency Response	20Hz-20KHz
Built-in Fan	Yes
Dimensions	19.0" L x 10.0" W x 5.0" H
Weight	14.0 lbs

9. TROUBLESHOOTING

If you encounter any issues with your MM2000BT, please refer to the following common problems and solutions:

- **No Power:**
  a. Check if the power cable is securely connected to both the amplifier and the wall outlet.
  b. Verify the 110V/220V selector switch on the rear panel is set correctly.
  c. Check the fuse on the rear panel and replace if blown.

- **No Sound Output:**
  a. Ensure the Master Volume knob is turned up.
  b. Check individual microphone and music volume knobs.
  c. Verify speakers are correctly connected to the SPEAKER OUTPUT terminals with correct polarity.

d. Ensure the correct input source is selected (Bluetooth, USB, SD, RCA/Aux).

e. If using Bluetooth, ensure your device is paired and its volume is turned up.

- **Distorted Sound:**

a. Reduce the Master Volume or individual input volumes.

b. Check speaker impedance (4-16 ohms) and ensure it matches the amplifier's requirements.

c. Adjust EQ settings to remove unwanted frequencies.

- **Microphone Not Working:**

a. Check microphone cable connection.

b. Ensure microphone volume is turned up.

c. If using a condenser microphone, ensure +48V Phantom Power is engaged.

- **Bluetooth Connectivity Issues:**

a. Ensure the amplifier is in Bluetooth mode.

b. Check that no other device is currently paired with the amplifier.

c. Move your Bluetooth device closer to the amplifier (within 30 feet).

10. MAINTENANCE

Proper maintenance will ensure the longevity and optimal performance of your MM2000BT amplifier:

- **Cleaning:** Use a soft, dry cloth to clean the exterior of the unit. Do not use abrasive cleaners, solvents, or waxes.
- **Ventilation:** Regularly check that the ventilation grilles are free from dust and debris. A built-in fan helps maintain optimal operating temperature.
- **Storage:** When not in use for extended periods, store the amplifier in a cool, dry place away from direct sunlight and extreme temperatures.
- **Cable Connections:** Periodically check all cable connections for tightness and wear. Loose connections can lead to signal loss or intermittent issues.

11. WARRANTY AND SUPPORT

Technical Pro products are designed for reliability and performance. For warranty information or technical support, please refer to the documentation included with your purchase or visit the official Technical Pro website. Keep your purchase receipt as proof of purchase for any warranty claims.

Related Documents - MM2000BT

Technical Pro MM2000BT Professional Karaoke Amplifier User Manual

User manual for the Technical Pro MM2000BT Professional Karaoke Amplifier with USB & SD Card & Bluetooth Inputs. This guide covers front panel and rear panel connections, operation, and troubleshooting.

Technical Pro Hybrid Amplifier Operating Manual

Comprehensive operating manual for the Technical Pro Hybrid Amplifier (models HB1502U, HB2502U, HB3502U), detailing features, safety precautions, front and rear panel controls, remote functions, and connection guidance.

Technical Pro Hybrid Amplifier User Manual (H1502UrBT, H2502UrBT, H3502UrBT)

Comprehensive user manual for the Technical Pro H1502UrBT, H2502UrBT, and H3502UrBT Professional Hybrid Amplifiers. This guide covers front panel controls, rear panel connections, remote operation, audio sources, speaker setup, Bluetooth connectivity, microphone usage, and safety precautions.

Technical Pro POWER65 6500W 2U Professional 2-Channel Power Amplifier

Detailed specifications and features of the Technical Pro POWER65, a 6500W 2U professional 2-channel power amplifier. Includes input/output details, performance metrics, physical dimensions, and ordering information.

Technical Pro H4502HD Digital Hybrid Amplifier/Preamp/Tuner with USB, SD, Bluetooth

Detailed specifications and features of the Technical Pro H4502HD, a 4500-watt peak power digital hybrid amplifier, preamp, and tuner with USB, SD card, and Bluetooth connectivity.